URBAN DISTRICT COUNCIL

OF

CHESTER-LE-STREET

REPORT

OF THE

Medical Officer of Health

FOR THE YEAR

1938.

JOHN DOWNIE TRAIL, M.B., Ch.B. (Aberdeen)
D.P.H. (Aberdeen).

CHESTER-LE-STREET:
T. DUFTY, Lambton Press, Bridge End.

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Urban Council Chambers,
Chester-le-Street,
July, 1939.

To the Chairman and Members of the
Chester-le-Street Urban District Council.

Gentlemen,

I have the honour to submit my Annual Report on the Health, Vital Statistics and Sanitary Circumstances of your area for the year 1938.

The Report is prepared on the lines laid down by the Ministry of Health.

Acknowledgment is accorded to all Members of the Council for their encouragement and support, to the Staff for its loyal co-operation and in particular to Mr. George C. Banks, Sanitary and Housing Inspector. His assistance in the preparation of this Report deserves especial reference, and the section dealing with the Sanitary Circumstances of the area has been, as in previous years, almost entirely his own production. The department has now considerable additional responsibilities in connection with A.R.P.

I am, Mr. Chairman and Members,
Your obedient Servant,
JOHN DOWNIE TRAIL,
Medical Officer of Health.

PUBLIC HEALTH OFFICERS OF THE AUTHORITY.

Medical Officer of Health—

JOHN DOWNIE TRAIL, M.B., Ch.B. (Abd.), D.P.H. (Abd.).

The Medical Officer holds the combined appointments of District Tuberculosis Medical Officer for the Durham County Council, and that of part-time Medical Officer of Health for the Chester-le-Street Urban District Council.

Sanitary Inspector—

GEORGE C. BANKS, M.R.S.I., DIPLOMA INST. HYGIENE.

The Sanitary Inspector is a whole-time officer, and holds the Sanitary Inspector's Certificate, the Meat and other Foods Inspector's Certificate, and the Certificate in Sanitary Science as applied to Public Works and Buildings of the Royal Sanitary Institute. The Diploma in Cattle, Meat and Food Inspection of Liverpool University and also the Diploma of the Institute of Hygiene, 1st Class Instructor (A.R.P.S.) Home Office Certificate.

Housing and Shops Inspector—

GEORGE C. BANKS, M.R.S.I., DIPLOMA INST. HYGIENE.

The Ministry of Health contributes half the salaries of the Medical Officer of Health and the Sanitary Inspector.

STATISTICS AND LOCAL CONDITIONS OF THE AREA.

The District has an area of 2,647 acres.

The Population on the census return of 1931 was 16,639.

The resident population (Registrar General's Return) 1938 was 17,080.

The number of inhabited houses in 1938 was 4,640.

The actual product of a penny rate for the year ended 31st March, 1938, was £257, and for the same period the rateable value was £69,739.

The number of inhabited houses was as follows:—

Terrace Houses	2708
Semi-detached	524
Detached	112
Houses and Shops (combined)	77
Farm Houses and Cottages	16
Council Houses	1203
Total	4640

The area of the Chester-le-Street Urban District is 2,647 acres. There has been a slight alteration in district as a result of the Review of County Districts in 1937. This, however, has only affected the south-west corner of the area.

Much of the Urban District is rural in character, and included in the area is the Town of Chester-le-Street and the mining villages of Chester South Moor to the South, Pelton Fell and Newfield to the West, together with South Pelaw and High Flatts in a Northernly direction.

Chester-le-Street Town lies in a basin surrounded by hills and uplands with a gentle rise from the River Wear to the Westward. The situation is such as to allow of very satisfactory ground drainage and sewage gravitation by reason of the consistent fall to the River and Sewage Disposal Plant.

The industrial occupation of the people consists chiefly of coal mining, the collieries being, for the most part, on the outskirts of the Town. There is also a large confectionery factory and a depot of a Motor Transport Company in the district.

The geological formation is carboniferous in character, with a gravel sub-soil, and isolated areas of sand. The latter, however, are not such as to interfere seriously with building activities.

Considerable building activity is now in progress, and is being carried out by the Council and others. The environs of the Town are being rapidly developed as residential estates. All building schemes are planned in accordance with the Town Planning requirements.

Chester-le-Street has an attractive Riverside Park situated in pleasant surroundings, and also a Children's Playground and Paddling Pool. The Town, now a popular shopping centre, is of ancient origin. Its Church and Castle are of great historical interest, attracting many visitors. Many Roman remains have been from time to time unearthed during excavations, and some of these are to be seen at the north side of the Parish Church.

EXTRACTS FROM VITAL STATISTICS.

	Total	Male	Female
Live Births: Legitimate	252	137	115
Illegitimate	14	7	7
Birth-rate per 1,000 of the estimated resident population			15.6
Still Births	5	5	Nil
Rate per 1,000 (live and still) births ...	18.4		
Deaths	226	120	106
Death-rate per 1,000 of the estimated resident population			14.3

Deaths from Puerperal Causes.

Puerperal Sepsis	Nil
Other Puerperal causes	Nil
Total	Nil

Rate per 1,000 (live and still) births—Nil.

Death-rate of Infants under One Year of age.

All infants per 1,000 live births	82.7
Legitimate Infants per 1,000 legitimate live births	77.2
Illegitimate Infants per 1,000 illegitimate live births ...	14.3
Deaths from Measles (all ages)	Nil
Deaths from Whooping Cough (all ages)	1
Deaths from Diarrhoea (under 2 years)	1

Birth Rate.

This shows a slight decrease from last year, being 15.6 compared with 16.6 per 1,000 of the population in 1937. The rate for England and Wales during the same period was 15.1.

Death Rate.

INFANTILE MORTALITY.

As will be observed from the table given below, there has been some increase in the incidence of deaths of infants under one year of age during the year 1938, the figures being 23 and a consequent Infantile Mortality death rate of 81.2 per 1,000 of the population, as against 17 and a rate of 59.9 during 1937.

There is nothing to support the possibility of this increase being due to puerperal conditions, because, as will be seen from the comments made regarding this subject, the area has been remarkably free from deaths of puerperal origin. It is a matter for conjecture as to whether the critical period through which

the country passed in 1938, and the consequent anxiety and mental distress, so generally apparent, may be, in some way, responsible for this increase in these deaths.

It is certain that, in view of the splendid facilities which have been, and are still, available for mothers, one cannot reasonably attribute this increase in Infantile Mortality to the lack of expert guidance in the maintenance of the health and well-being of infants of this age.

It is again desirable, however, to emphasise the important necessity of mothers availing themselves of these valuable and free services, as lives and suffering may well be saved by so doing, and the future health and welfare of their babies be assured, as a result of consultation with the medical officers and staff of the Welfare Clinic.

1928	Infantile	Mortality	per	1,000	Live	Births	105.0
1929	,,	,,	,,	,,	,,	,,	102.0
1930	,,	,,	,,	,,	,,	,,	94.0
1931	,,	,,	,,	,,	,,	,,	88.0
1932	,,	,,	,,	,,	,,	,,	101.0
1933	,,	,,	,,	,,	,,	,,	96.0
1934	,,	,,	,,	,,	,,	,,	63.0
1935	,,	,,	,,	,,	,,	,,	89.9
1936	,,	,,	,,	,,	,,	,,	82.4
1937	,,	,,	,,	,,	,,	,,	59.9
1938	,,	,,	,,	,,	,,	,,	81.2

DEATHS FROM PUERPERAL CAUSES.

The brightest note that it is possible to introduce into this Annual Report lies in the fact that there have been no deaths from Puerperal causes during the year 1938, and it may be stated with every justification that this fact reveals a situation which should afford all concerned the greatest satisfaction.

There is no doubt that deaths from Puerperal conditions are always a source of concern, if not anxiety, to health authorities, and therefore the fact that there has been a complete absence of deaths from this alarming origin is not only gratifying, but also indicates in the most definite manner that medical science is not only marching on in the right direction, but may also claim a high degree of success in the modern methods of dealing with puerperal conditions.

In this connection one might usefully refer to the new treatment which has proved so efficacious, namely, the drugs of the sulphonilamide group.

There is not the slightest doubt that this group of drugs has been responsible for accomplishing a remarkable, if not dramatic, success in connection with those diseases associated with child-birth. This modern treatment should undoubtedly create a confidence hitherto unknown — particularly in those who have hitherto regarded child-birth as a condition fraught with danger and possible tragedy.

In view of this undisputed fact, there should be less anxiety and fear in connection with child-bearing, and it is reasonable to assume that as these facts become more widely known, there should, as a consequence, be some increase in the birth-rate.

It is extremely important that discussion of this subject should not be concluded without further reference to the important and valuable work which is being carried out at the Ante-natal Clinic —which, in the case of Chester-le-Street, is situated in West Lane— as it must be realised that there are other ante-natal conditions in the nature of toxæmia and physical abnormalities which call for, and do receive, close attention at these centres.

Furthermore, it cannot be too strongly impressed that these facilities are provided for the special help and guidance of expectant mothers, and it is in view of this fact that Health Officers make the appeal that such should avail themselves of the opportunities and services that these centres afford, without charge.

Some contend that it has been reasonably established that expectant mothers—particularly the younger women—experience periods of intense anxiety, which may possibly be attributed to some extent to the somewhat critical period through which the whole of the nation is now passing, and it should therefore be stated that, quite apart from the medical conditions already discussed, there will be obtained at the Clinic that sympathy, understanding, and general guidance, calculated to relieve this psychological condition which, in itself, may have far-reaching consequences.

COMPARATIVE TABLE OF VITAL STATISTICS DURING THE LAST 5 YEARS, 1934-1938.

Year	Estimated Population	Birth Rate	Death Rate	Infantile Mortality per 1,000 live births
1934	16,980	17.0	11.5	89.9
1935	16,820	14.1	11.4	63.0
1936	16,950	15.9	11.1	59.9
1937	17,000	16.6	12.5	82.4
1938	17,080	15.6	14.3	81.2

PNEUMONIA.

Considerable interest will be found in the fact that there has been a marked reduction in the incidence of Pneumonia of all forms, there having been 17 less cases notified and three less deaths compared with the number notified and the deaths for 1937. The utmost value is now attached to the use of M. and B. 693 in the treatment of Pneumonia, and it is confidently anticipated that its continued use will mean the saving of a large number of valuable lives.

CAUSES OF DEATH IN 1938.

Causes	Males	Females	Total
Heart disease	34	42	76
Cancer	12	15	27
Nephritis	6	0	6
Other digestive disorders	2	1	3
Congenital debility and premature birth	9	4	13
Senility	0	1	1
Suicide	1	0	1
Other violence	3	2	5
Other defined disorders	11	7	18
Diabetes	3	1	4
Cerebral hæmorrhage	10	4	14
Bronchitis	4	2	6
Other circulatory disorders	10	11	21
Pneumonia (all forms)	5	1	6
Other respiratory disorders	1	0	1
Diarrhœa (under 2 years)	1	0	1
Appendicitis	1	1	2
Whooping cough	1	0	1
Diphtheria	1	0	1
Influenza	3	2	5
Encephalitis lethargica	1	0	1
Pulmonary tuberculosis	6	3	9
Tuberculosis (other forms)	1	1	2
Syphilis	0	1	1
G.P.I., tabes, etc.	0	1	1

EXCESSIVE MORTALITY—HEART DISEASE.

There has been a considerable increase in the incidence in the number of deaths from Heart Disease during the year under review. This increase will be the more apparent when it is stated that there were 76 deaths from this cause, compared with 66 in the year 1937. It is difficult to attribute this increase to any single factor, but it may be stated with considerable truth that many of the deaths occurred in aged persons.

Contributory causes, however, may be numerous, and an additional explanation would possibly be found in the fact that the nation has been faced with periods of extreme anxiety, maintained for long duration, and the inevitable nervous strain and tension may, to some extent, be responsible for some of this increase.

Then, again, it should be pointed out that Heart Disease, as a cause of death, may, in many cases, be actually secondary to the primary cause.

More settled conditions, not only nationally but internationally, will probably be reflected in a decrease in the number of deaths from this origin.

Birth-rate, Death-rate and Analysis of Mortality during the year 1938.

	Rate per 1,000 Total Population		Annual Death Rate per 1,000 Population.									Rate per 1,000 Live Births	
	Live Births	Still-births[3]	All Causes	Typhoid and Para-typhoid fevers	Small-pox	Measles	Scarlet Fever	Whooping Cough	Diphtheria	Influenza	Violence	Diarrhœa and Enteritis (under Two years)	Total Deaths under One year
England and Wales ...	15·1	0·60	11·6	0·00	0·00	0·04	0·01	0·03	0·07	0·11	Not Available	5·5	53
125 County Boroughs and Great Towns, including London ...	15·0	0·65	11·7	0·00	0·00	0·05	0·01	0·03	0·07	0·10		7·8	57
148 Smaller Towns Estimated Resident Populations 25,000 to 50,000 at Census 1931	14·4	0·60	11·0	0·00	0·00	0·03	0·01	0·02	8·06	0·11		3·6	51
London	13·4	0·48	11·4	0·00	0·00	0·06	0·01	0·03	8·05	0·06		13·1	57
Chester-le-Street ...	15·6	0·29	14·3	0·00	0·00	00·0	0·00	0·06	0·86	0·29	0·35	3·8	22

The Maternal mortality rates for England and Wales are as follows:

	Puerperal Sepsis.	Others.	Total.
per 1,000 Births (i.e. live and still) ...	0·86	2·11	2·97

CANCER.

It will be seen from a study of the causes of deaths during the year 1938 that there were 27 deaths as a result of Cancer, compared with 21 deaths in 1937.

This disease is responsible for 70,000 deaths annually in England and Wales, so that any measure which may be a means of assisting the whole of the medical profession in its efforts to obtain control of this disease is worthy of mention. Perhaps the most important measure in relation to Cancer is the Cancer Act, 1938, now presented to Parliament by the Ministry of Health. The effect of this proposed legislation will be to authorise financial aid towards additional expenditure of hospitals incurred in the improvement and enlargement of the services necessary for use in the modern treatment of this malady.

This improvement will be especially concerned with the improvement of facilities for radiation treatment, especially radium Therapy, and should improve the treatment of Cancer in all hospitals.

Certain forms of Cancer, in particular superficial cancer of the skin, i.e., Rodent ulcer and Epithelioma, if taken at an early stage, have a high degree of curability by the application of radium. The other standard form of treatment at present is surgical treatment, and in some cases radium treatment and surgery are combined. There is no doubt, however, that radium, in the treatment of Cancer, is becoming increasingly important, as is shown by the increase in its use year by year.

As regards new lines of treatment, Radium Beam Therapy, where large quantities of radium are used, has been attempted in selected types of cases where, for reasons of accessibility other forms of Radium Therapy are inapplicable, and a report on its use established the fact that " Radium Beam Therapy is a valuable form of treatment, and the results are sufficiently encouraging to justify an increase in the scope of the investigations so as to include its use in the treatment of Cancer in other sites."

NURSING IN THE HOME.

The conditions under this heading are much the same. Chester-le-Street Nursing Association provides two Nurses for general district work, and there is also now a Nurse both at Chester Moor and Pelton Fell also engaged in these duties.

(a) **Infectious Diseases.**—As the great majority of infectious disease cases are removed to the Isolation Hospital (which is situate in the Urban District) no special arrangement for this purpose is in operation.

(b) **Midwives.**—There are 5 certified midwives practising in the Area. These are subject to the supervision of the Inspector of Midwives of the Durham County Council.

The Local Authority does not employ or subsidise any of the above midwives.

The scheme under the new Midwifery legislation is expected to prove of the greatest value.

Any scheme which will tend to reduce the maternal mortality rate is welcomed and encouraged by all interested in this important subject.

LABORATORY FACILITIES FOR THE EXAMINATION OF PATHOLOGICAL AND BACTERIOLOGICAL SPECIMENS.

As in previous years, laboratory facilities for the examination of specimens for Diphtheria, Tuberculosis and the Enteric group of organisms are available at the Durham University College of Medicine, by arrangement with the Durham County Council.

The following are particulars of the examinations made in 1938:—

Disease.	Positive.	Negative.
Diphtheria	19	69
Tuberculosis	17	64
Enteric Group	—	1

LEGISLATION IN FORCE.

The following Acts and Bye-Laws are in force in the district:—

The Public Health Act, 1936, came into operation on October 1st, 1937, and the new Act consolidates to a considerable extent much of the previous Public Health legislation.

Bye-laws as to Cleansing, Nuisances, Common Lodging Houses, Tents, Vans and Sheds, Slaughter Houses, Offensive Trades, Public Bathing and New Streets and Buildings, were sanctioned by the Ministry of Health, 12th February, 1923. The Public Health (Smoke Abatement) Act, 1926, came into operation on the 1st July, 1927. The Public Health (Tuberculosis) Regulations, 1930, came into operation in January, 1931, and the Consolidated Housing Act, 1930, came into operation during August of that year.

Housing (Financial Provisions) Act, 1933. The Slaughter of Animals Act, 1933, and the Housing Act, 1935 and 1936, also the Housing (Prevention and Abatement of Overcrowding) Act, 1935. The Public Health Act, 1936, came into operation July, 1936.

GENERAL PROVISION OF HEALTH SERVICES FOR THE AREA.

Hospitals provided or subsidised by the Sanitary Authority, or by the County Council:—

(a) **Fever.**—The district is included for the purpose of Isolation Hospital accommodation in that under the Chester-le-Street Joint Hospital Board.

(b) **Smallpox.**—The Smallpox Hospital situate at Black Fell, Birtley, is no longer in use, and provision is now made at Shincliffe Smallpox Hospital. It is pleasing to note that there have been no cases of Smallpox in your area for a number of years.

(c) **Tuberculosis.**—Accommodation for men, women and also children suffering from Tuberculosis is provided by Hospitals and Sanatoria outside the area under the Durham County Council's Tuberculosis Scheme. In some instances, surgical patients receive treatment in the neighbouring Hospitals and Institutions. The local Dispensary for Tuberculosis in the Urban Area is situate in Ropery Lane, Chester-le-Street.

(d) **Typhoid and Paratyphoid.**—It is pleasing to note that there have been no cases of Typhoid or of Paratyphoid Fever.

(e) **Children.**—Accommodation and treatment for sick children is provided by the Hospital for Sick Children, Newcastle upon Tyne, and the Children's Hospital, Gateshead, which also admits many cases of general illness among children from this district.

(f) **Orthopædic.**—Although there is no special provision in the Urban District, for this purpose, facilities are provided by the Hospitals above mentioned. The Royal Victoria Infirmary, Newcastle upon Tyne, is also available for the treatment of patients as and when required.

(g) **Throat, Nose and Ear.**—Treatment for diseases of the ear, nose and throat is afforded by the Newcastle Royal Infirmary and the Throat, Nose and Ear Infirmary, Rye Hill, in the same City. There is also a special department for diseases of the eye available in the former hospital.

(h) **Eye.**—There is a special department at the Royal Victoria Infirmary, Newcastle, for the treatment of diseases of the eye.

(i) **Maternity.**—In this connection, two hospitals are provided by the Durham County Council. One of these is situate at Bishop Auckland and the other at Blackhill, to which cases from this district may be admitted. It is understood that patients pay part of the cost of their maintenance, according to their financial circumstances. The Princess Mary Maternity Hospital at Newcastle upon Tyne accepts both paying and non-paying patients.

(j) **Maternal Mortality, Etc.**—The following facilities are afforded by the Durham County Authority to Medical Practitioners in cases of Puerperal Pyrexia and Puerperal Sepsis, and the Practitioners of the area have from time to time availed themselves of this service:—

(1) To have a second opinion on the case;

(2) To have a bacteriological examination of the
(a) lochia; (b) blood;

(3) That the patient may be admitted to hospital;

(4) That a trained nurse be provided.

The Puerperal Pyrexia Regulations, 1939, come into operation on the 1st April, 1939.

Health Visitors' Reports.—There were 21 reports received from Health Visitors—chiefly relating to cases of Tuberculosis. These also, however, refer to sanitary defects, overcrowding, change of address, and disinfection of infected premises, and have proved helpful to the department.

INSTITUTIONAL PROVISION FOR UNMARRIED MOTHERS, ILLEGITIMATE INFANTS AND HOMELESS CHILDREN.

No special Institutions exist for these cases, but, at present the Chester-le-Street Board of Guardians admits them to its Institutional Hospital and Cottage Homes, Chester-le-Street, and the older children are accommodated at the Cottage Homes, Medomsley.

AMBULANCE FACILITIES.

(a) For cases of Infectious Disease the Chester-le-Street Joint Hospital Board maintains motor ambulances. Puerperal Fever and Puerperal Pyrexia, which have to be removed to Princess Mary Maternity Hospital, Newcastle-on-Tyne, under the Durham County Council Scheme, are removed by arrangement between the Urban District Council and a private ambulance service.

(b) Non-infectious and accident cases are dealt with by the motor ambulance provided by the Chester-le-Street and District Ambulance Committee.

CLINICS AND TREATMENT CENTRES.

Provided by the County Council.

Maternity and Child Welfare Centre	Mains House, West Lane, Chester-le-Street	Wed., 9.30 to 11 a.m., & 1.30 to 3.30 p.m.; and alternate Tuesday mornings (Ante-natal Clinic) from 9.30 a.m. to 11, and 1.30 to 3.30.
School, Dental, Eye & General Clinic	Hexham Villa, Birtley	By Appointment.
Tuberculosis Dispensary	Ropery Lane, Chester-le-Street	Monday, 9.30 a.m., for men. Thursday, 9.30 a.m., for women and children.
Venereal Diseases	Royal Infirmary, Newcastle-on-Tyne	Men are attended Monday, 5.30 p.m., Thursday and Saturday at 8.30 a.m., and Wednesday and Friday at 8.30 p.m. Women and Children are seen on Monday at 8.30 a.m. and 3.30 p.m.; on Wednesday and Friday at 8.30 p.m., and on Thursday at 5.30 p.m.

SANITARY CIRCUMSTANCES OF THE AREA.

Water Supply.—Very reliable evidence as to the purity of the water supply in the area is to be found in the absence of water-borne diseases and epedemics.

Although parts of the district are still regarded as rural in character, the number of wells and springs from which water is obtained for drinking purposes are gradually diminishing. In this same connection, it is also interesting to note that bacteriological reports continue to indicate satisfactory freedom from dangerous organisms. It is considered that the water from some of the sources referred to would, if necessary, prove definitely valuable in the event of the failure of the general supply, which cannot be ignored in times of National emergency.

It is for this reason that it is considered important that in these cases of alternate supplies — where the tests are consistently high grade — should be carefully preserved for emergency requirements, in case of the failure of the usual source of supply.

There has been considerable improvement with regard to the previous lack of domestic supplies hitherto so prevalent at Pelton Fell. A new main has been extended from Hett Hills to New Grange Terrace, and thus increasing the volume of water now available for domestic and drinking purposes in that part of the district.

It may be useful to report and repeat the suggestions made from time to time concerning the desirability of removing all water mains from Slum Clearance areas immediately after the rehousing of the people from the dwellings in these districts. This action is considered very important in that these old mains, if not removed, may — years after Slum Clearance has been completed — present an unexpected focus of some epidemic, and leave a public health department in a state of uncertainty, if not helplessness, as to where it will be possible to locate an enemy which lies concealed among grass-covered and long forgotten water mains. The critic, if too critical, and the anticipator of trouble is not usually welcome, but if the suggestions made are constructive in character they should be carefully considered. It is certain that adequate preventive measures may very well reduce the possibility of loss of life through epidemics which might have been avoided; unnecesary waste of public money, and the saving of the energies and the prestige of — in these days of casualty services and additional emergency services — an already anxious and fully employed Public Health Department.

All will agree that the possibility of pollution through discarded and forgotten water mains should be avoided, and such dangers will be greatly reduced by the simple expedient of taking up the whole of the old water system of pipes.

New legislation (the Water Undertakings Bill), which is under consideration, extends special regard to the cutting off of a domestic water supply through non-payment of water rates. Such procedure as the cutting off of the water supply for the reasons mentioned has always been regarded from a public health aspect as a matter for consternation. Such action may mean the persecution of innocent children and considerable hardship for adults. To these may be added the grave possibility of nuisance and epidemics. In any case, such action is entirely contrary to even the simple standards of public health and hygiene. For the several reasons abovementioned, the suggested new legislation would be unwelcome. It is reasonably conceivable that resort should be made to the County Court for the recovery of debts of this nature as provided for similar purposes, rather than cause unnecessary suffering and imperil the health of the community.

There is no question but that the Public Health Act, 1936, has provided authorities with special and excellent protective measures with regard to the water supplies of the Country, and provides much additional powers for ensuring an adequate supply of pure water.

The Durham County Water Board are responsible for the general district supply, and there has been no cause for action with regard to the purity of the water supplied during the year under consideration. There is increased willingness to co-operate and investigate any suggestions submitted, and these features are worthy of note and appreciation.

Many technicians recognise the difficulty in maintaining a reliable water system where damage through mining subsidence is always present, and, although sympathetic, the public health demands an uncompromising attitude concerning the purity of the public water supplies.

RIVERS AND STREAMS.

" A survey of the River Wear was carried out by the research staff of the Ministry of Agriculture and Fisheries in conjunction with the department of the County Medical Officer of Health in July, 1938, and was the subject of a report by the Station Committee on Rivers Pollution," states the County M.O.H.'s report.

Extracts from the references made in the quarterly report for December, 1938, provides some very interesting facts concerning the River Wear.

It would appear from the report of the Research Station Staff that the River Wear is practically free from pollution above the Crook and Beechburn Beck, and, in fact, the Town of Bishop Auckland obtains some of its domestic water supply " from the River Wear below the confluence of the Beck."

From the facts furnished it would seem that pollution of the Wear is caused largely by coal washing, by-product works and sewage disposal works effluents. Of more immediate concern to this locality is the fact that there is no suggestion of the effluent from the Chester-le-Street Sewage Disposal Works being involved.

Near Chester-le-Street, the two tributaries of the Lumley Burn and the Cong Burn were found to be seriously polluted. It is stated that " both these Burns carried effluents from coal-washing plants, by-product works and sewage works, and the result produced a deleterious effect on the River Wear."

In the meantime, a chlorinating plant has been installed at the Chester-le-Street Sewage Disposal Works, and it is confidently anticipated that a vastly improved effluent will be forthcoming.

From local observations and the action which has been taken from time to time, it would appear that there has been a considerable reduction in the nature and degree of the pollution from the local by-product works and coal washing, when compared with some previous years.

Local authorities are somewhat handicapped with the perplexing problem of maintaining encouraging industry and employment, and at the same time carrying out the various duties and obligations of public health. It must be stated, however, that immediate action has consistently been taken when pollution has been observed.

With the anticipated change-over to the water carriage system, and the gradual elimination of obsolete sewers and long forgotten or concealed drain outlets, greater freedom from pollution and improved conditions may be confidently expected.

Slum Clearance here presents additional importance in the above connection. This activity ensures new drains for old, and should, in conjunction with modern sewage disposal methods, prove of immense value.

Apart from the above facts, it may also be repeated that the removal of the old dwellings near the Burn, with the frequently insanitary privies and ash-pits connected with the same, has assisted in a marked manner to materially mitigate pollution prevalent in past years, due to slum dwellers disposing of house and other refuse into the readily available waters of the Cong Burn.

There has been some pollution traced to other districts in connection with sewage effluent, but on the whole the improvements, carried out and impending, should mean much in the march to the pure, clear and sparkling waters so much desired.

DRAINAGE AND SEWAGE.

Chester-le-Street Urban District is fortunate in possessing a most modern Sewage Disposal Plant, and one which has proved worth the money and labour expended upon it. As previously stated, and is again repeated as a matter of interest, this Sewage Disposal Works cost approximately £40,000, and was officially opened on July 1st, 1933.

The County staff are now carrying out extensive road works near the boundary of the Works, and soil obtained during these operations will materially assist in filling in unsightly hollows, and should create conditions very suitable for tree planting and other local improvements. In connection with the closing up of the allotments, the land has now been cleansed and the appearance may now be regarded as a further amenity. A suggestion that the land be used by a farmer for growing oats did not materialise.

No complaints have been received by this department concerning effluvia, and considering the proximity of the adjacent residential estate, these facts speak highly of the efficient manner in which this Sewage Disposal Plant is operated. The paths and grass verges are well maintained and tends to present a park-like appearance, which all assist in obscuring in a most satisfactory manner the real nature of these public works.

In May, 1938, the Surveyor reported: " Your Sewage Disposal Works are now dealing with 600,000 gallons of sewage per day, and to prevent complaints from odour which emanates from the works during hot weather I suggest that chlorine be introduced as soon as the sewage enters the works, i.e., at the entrance to the

sedimentation tanks. . . . . Before this Chlorinator can be installed you must have a supply of water to work the Chlorinator. You have no Town's supply of water at these works, and I suggest that you get an estimate of the cost of laying on a water supply from the Durham County Water Board's main in Shield's Road."

This Chlorinator plant has now been installed and is working quite satisfactorily. There were several difficulties in installing this machine. In order to provide a water supply it was necessary to lay mains for a considerable distance across the grounds and also to provide an electricity installation to work the instrument. The various obstacles were, however, duly surmounted, and this additional means of treating sewage should greatly help in producing an innocuous effluent. It may also be mentioned that chlorine has proved bacteria-destroying powers of considerable magnitude.

Of the various methods of sewage treatment, I know of no more efficacious combination than those now operating here, and it would appear impossible to visualise an offensive effluent or pollution after treatment by the various agents now employed.

Chester Moor Sewage Works.—As a result of a series of circumstances, further tenders are being invited in connection with the proposed improvements. The new scheme will involve the laying of a 9-inch pipe from Chester Moor to Chester-le-Street, where the sewage will have an outfall and be treated at the Chester-le-Street Sewage Disposal plant. Certain houses, however — which are few in number — are situated at a level much lower than the position of the new sewer, and a small and much modified plant will be installed to accommodate these premises.

It is much hoped by all concerned that the work will soon be commenced in connection with this project, as the prevailing conditions are now, admittedly, far from satisfactory. The extension of the sewer from Chester-le-Street will, without doubt, prove the best solution, as, with the new chlorinator already described, these modern facilities should prove advantageous for the purpose indicated.

Pelton Fell.—The sewage from Pelton Fell is conveyed by natural gravitation to Chester-le-Street through the sewer which was laid in 1922. The sewage matter from the rapidly extending Council estate at Whitehill is discharged into the main pipe at the base of the " Burnt House " bank. The new sewer in Newfield Dene continues to be effective, and without doubt has eliminated the very considerable pollution caused by the many drains which hitherto emptied into the " Burn " at this point. It is understood that there has been some recent trouble due to the tipping of colliery refuse at this juncture, and a manhole has been damaged, and the level of the water in the stream has been raised to that of the manhole mentioned, with the consequent danger of overflowing into the sewer. Representations have been made by the

Surveyor to the Colliery Company concerned, and it is further gathered that this Company are now about to repair the manhole, and are preparing to excavate a new channel for the "Burn" so as to avoid further damage to the sewer. They have also indicated their intention to culvert the stream so as to permit of further tipping space.

Swimming Bath.—The desirability of purchasing the house named the "Hawthorns" and the grounds connected with the same for the purpose of erecting swimming baths received the deliberations of the Council, and the proposition is still under consideration.

The provision of swimming baths would constitute a valuable amenity to the Town.

PRIVIES AND ASHPITS.

It is again possible to report considerable progress in the matter of Privy conversions.

There were 17 Ashpit privies converted in the year under review. The premises concerned are as follows:—

10, 11, 12, Foundry Lane	3
19, 21, 29, Melville Street	3
Workshop (Wright & Kellett)	1
Oak Street, Chester Moor	2
Church Street, Chester Moor	5
7, Elizabeth Street	1
15, Elizabeth Street	1
21, Allan Street	1

Slum Clearance is constantly reducing the number of ash closets and privies in this Urban area, and the appended table is intended to indicate the approximate number of the conservancy type of conveniences in the various Wards:—

Ward	Ash-closets & Privies	Ash Pits
North Ward	145	148
South Ward	269	135
Pelton Fell Ward	389	104
Central Ward	139	206
West Ward	30	104
Chester Moor	6	—

It is now anticipated that early progress will be made in connection with the proposed privy conversion scheme. In this connection, it is a matter for gratification that modern sewage disposal facilities are available for dealing with the increased flow of sewage locally. The new chlorinator should prove of the greatest advantage in dealing with this increase in volume of sewage for treatment.

Of further technical importance is the fact that the greater part of the sewage matter treated at Chester-le-Street, is by natural gravitation to the outfall, thus considerably reducing the cost which would be the case if it were necessary to resort to pumping.

Thus all the relative public services are ready and in favour of the introduction of the water carriage system, and in view of the residential development of the area —particularly at the south end of the town — together with the fact that public health demands in a modern town the most reliable and hygienic system that can be obtained. The Public Health officials and the Council will no doubt continue to press for this very desirable change.

ERADICATION OF BED BUGS.

Notwithstanding the dilapidated and insanitary nature of the Slum Clearance property dealt with in 1938, it cannot be said that there was any evidence of extensive infestation of premises or furniture. This is no doubt directly attributable to the fact that the occupiers — although compelled by circumstances to live under such deplorable conditions — were, nevertheless, not only cleanly, but often house-proud with regard to the cleanliness of their homes. In fact, it was not infrequently a somewhat pathetic experience to witness careful domestic effort being made — even to the extent of carefully white-stoning the door step — when in fact in some cases the whole structure was liable to collapse.

In view of these facts, it is not unexpected that no indication of verminous premises on a large scale — with special regard to bugs — were discovered. On the contrary, the chief problem locally is that presented by cockroaches, which were exterminated by " Kromo " powder.

The following are the tabulated particulars concerning action taken with regard to the eradication of bed bugs:—

(1) Number of Council houses found to be infested, 6; disinfested, 6; other houses found to be infested, 10; disinfested, 10.

(2) Methods employed for freeing infested houses from bed bugs and the name of the fumigant and/or insecticide used—General cleansing and the use of " Pestdoom " liquid bug oil."

(3) The methods for ensuring that the belongings of tenants are free from vermin before removal—Inspection and spraying with liquid bug oil.

(4) Whether the work is carried out by the Local Authority or by a contractor—By Local Authority.

(5) The measures taken by way of supervision or education of tenants to prevent infestation or reinfestation after cleansing—Verbal advice.

The new Hydrogen Cyanide (Fumigation) Regulations come into operation on 1st February, 1939. This method is considered by many as not only expensive but dangerous. The use of this gas is particularly dangerous under certain conditions and in the hands of inexperienced persons. There are records of fatal accidents as a result of this gas. It is noted that considerable emphasis is made in the new legislation on the subject of safety and precautionary measures.

So far Hydrogen Cyanide has not been used by this Authority for fumigation purposes.

SCHOOLS.

The Waldridge Lane School having been taken over by another authority as a result of the Review of County Districts, there are now 9 schools in the Urban area, the most unsatisfactory of these being the Burns Infants' and the Senior Church Girls' Schools.

It will be obvious to many that, for the greater part, the local schools are situate in pleasant environments. The most modern is that of Bullion Lane Intermediate School. At the time of compiling this report, additions and improvements are being carried out at Council School, Church Chare. With the development of the large housing estate at Whitehill, Pelton Fell, and the extensive Slum Clearance which has been carried out in that part of the district, it has become very apparent that a suitable school should be provided — at least for the very young children — at, or adjacent to, this estate. All must agree that Pelton Rosebery School is much too far for babies of five and six years of age; even though there is a 'bus service available for part of the distance, it is considered as very undesirable that infants should be exposed in wintry weather, and confronted with the anxiety of ensuring that they catch, and board, and descend safely. Moreover, there must be considerable concern among parents arising from this doubtful arrangement. Who will dispute but that they are right in their opinions, particularly under the present dangerous conditions as revealed and confirmed by the appalling monthly rate of road casualties.

Consider for a moment! It has been computed that there were 2,964 road fatalities for the first six months of this year, 1939, and 3,000,000 in twenty years of post-war motoring.

Logical argument would also disclose the amazing absurdity of bringing more children into the world; to engage specialists of all kinds with a view to making them the healthy men and women the nation and the parents so much desire, when catastrophe is concealed at every crossing, and so set at naught all the stupendous efforts which have been made for their preservation. Here the community is confronted with a problem — this question of tiny tots having to cross one of several crossings to enable them to go to school. Policemen are not available at every crossing in every town — and even policemen are ignored on occasion. If it is

true that the road fund does possess so much wealth, then the majority of the members of the community who comprise the nation will vote and press for more subways under all important crossings in every town, so as to ensure a greater degree of safety for school-children and, of course, adults also.

Lord Horder stated to a meeting of parents at Bedales School, Petersfield, Hampshire: " I would not bother so much about academic training — nobody bothered about mine — but I should bother about health, food, rest for the mind and body. . . . I would assess progress in terms of human happiness and contentment. . . . ."

This is without doubt the correct note. Education is admittedly important, but should young children be allowed to take the risk of breaking themselves in the effort? Health first, should be the watchword, otherwise these young people will find themselves thrown into the vortex of the inexorable economic machine and confronted with the realities of life, only to discover that they are bundles of nerves — attacked by this or that neurosis — and quite unable to bear the burden which modern life demands, in which case our credits become debits and disappointment is again experienced. In view of these rather disturbing possibilities that very foundation of a contented and happy life should become our chief object — and that is health.

Of the numerous activities of Durham County Council, one of the most important, and one which is recognised with admiration, is the effort being made by that Authority to provide modern schools in healthy surroundings. Thus they contribute in a most marked manner to preserving the young life of the County and in making healthy and contented citizens.

RAG FLOCK ACTS, 1911-1928.

There are no premises in the district in which Rag Flock is manufactured or sold.

SCAVENGING AND REFUSE DISPOSAL.

The position remains materially the same with regard to matters referred to under this heading. There are now 4 motor lorries — one of which acts as a reserve — and 2 horse-drawn vehicles in use for refuse removal and general scavenging. The Surveyor recently reported that " Bedford No. 3 losing oil and the bearings and cylinder walls are badly worn, and I ask your permission to purchase a reconditioned Bedford engine at £26." Sanction was given by the Council for this purpose.

During the year 1938 further possibilities were explored relative to the provision of a Refuse Destructor. On deliberating the subsequent reports on this proposition the project was temporarily abandoned on grounds of cost. It should be stated, of course, that Refuse Destructors were never intended to produce revenue, but rather to conserve and improve the public health.

In the meantime house refuse is still deposited in various parts of the district, and although no fires with the consequent nuisances have been observed for some time, it is again desirable to suggest that careful attention be paid to the fact that all tipping should be carefully controlled in conformity with the memoranda of the Ministry of Health of 1922, " The Deposit of Refuse on Land." The tip adjacent Seventh Avenue is considered too near dwelling houses. It is believed that tipping has now ceased here. Not only this Council but the whole of the community will subscribe to the urgency for a privy conversion scheme. Progressive public health administration demands modern methods in a modern Town. It is encouraging to note that progress is being made in this direction.

SUMMARY OF WORK DONE IN THE SANITARY INSPECTOR'S DEPARTMENT DURING THE YEAR 1938.

1.—Public Health Acts.	Number of Informal written Notices by Inspector.	Number of Formal Notices by order of Authority.	Number of Nuisances abated after Notice.
Dwelling-houses and Schools—			
Foul Conditions	—	—	—
Structural Defects	35	—	35
Overcrowding	—	—	—
Lodging-houses	1	—	1
Dairies and Milkshops	—	—	—
Cowsheds	—	—	—
Bakehouses	3	1	3
Slaughter-houses	—	—	—
Ashpits and Privies	18	—	18
Deposits of Refuse and Manure	3	—	3
Waterclosets	24	—	24
Defective Yard Paving	2	—	2
House Drainage—			
Defective Traps	—	—	—
No Disconnection from Sewers	—	—	—
Other Faults	7	—	7
Water Supply	10	—	10
Pigsties	—	—	—
Animals Improperly Kept ...	—	—	—
Offensive Trades	4	—	4
Smoke Nuisances	—	—	—
Other Nuisances (Refuse Bins)	3	—	3
Pollution of Streams	3	—	3
Meat Regulations	1	—	1
Shops	1	—	1
Rats	2	—	2
Totals	117	1	117

2.—WATER, FOOD AND DRUGS.

	Number
Samples of Water taken for Analysis	—
Samples of Water condemned as unfit for use	—
Seizure of Unwholesome Food	10
Convictions for exposing or selling Unwholesome Food ...	—
Sampes of Food and Drugs taken for Analysis	—
Samples of Food and Drugs found Adulterated	—

3.—PRECAUTIONS AGAINST INFECTIOUS DISEASE.

Lots of Infectious Bedding stoved or destroyed	—
Houses disinfected after Infectious Disease	107
Schools disinfected after Infectious Disease	45
Prosecutions for exposures of infected persons or things ...	—
Convictions for exposures of infected persons or things ...	—

4.—GENERAL.

Number of New Houses erected during year	323
Number of such Houses occupied during year	293
Council Houses completed	176
Council Houses occupied	146
Private enterprise	147
Private enterprise occupied	147
Ashpit-privies converted into Ash-closets	—
Ashpit-privies converted into Water-closets	—
Ash-closets converted into Water-closets	13
Total number of Water-closets in District	6,271
Total number of Ash-closets in District	965
Total number of Ash-pit privies in District	17

FACTORIES, WORKSHOPS AND WORKPLACES.

1.—INSPECTIONS FOR PURPOSES OF PROVISIONS AS TO HEALTH.

Including Inspections made by Sanitary Inspectors.

Premises.	Inspections.	Written Notices.	Occupiers prosecuted.
Factories with mechanical power ...	102	3	—
Factories without mechanical power	150	—	—
Other Premises under the Act (including works of building and engineering construction but not including outworkers' premises)...	50	—	—
TOTAL	302	3	—

2.—DEFECTS FOUND.

Particulars.	Found.	Remedied.	Referred to H.M. Inspector.	Number of defects in respect of which Prosecutions were instituted.
Want of cleanliness (S.1) ...	—	—	—	—
Overcrowding (S.2)	—	—	—	—
Unreasonable temperature (S.3)	—	—	—	—
Inadequate ventilation (S.4)	1	1	—	—
Ineffective drainage of floors (S.6)	—	—	—	—
Sanitary Conveniences (S.7)—				
Insufficient	—	—	—	—
Unsuitable or defective ...	2	2	—	—
Not separate for sexes ...	—	—	—	—
Other offences*	—	—	—	—
TOTAL	3	3	—	—

* Not including offences relating to Home Work or offences under the Sections mentioned in the Schedule to the Ministry of Health (Factories and Workshops Transfer of Powers) Order, 1921, and re-enacted in the Third Schedule to the Factories Act, 1937.)

SMOKE ABATEMENT.

Of the various factors operating in favour of smoke abatement in the Chester-le-Street Urban area, the tendency on the part of mine owners to electrify winding machinery and other plant is considered to be decidedly advantageous.

The only factory in the district of any magnitude has not given any cause for complaint, and the owner is always ready to co-operate and consider any practical and proved method of Smoke Abatement.

A new Bye-law for the regulation of the emission of black smoke from chimneys other than those of dwelling houses in the Chester-le-Street Urban area was confirmed by the Ministry of Health in June, 1937, and came into operation in August, 1937. This new bye-law regulates the emission of black smoke to three minutes within any continuous period of thirty minutes, from any one chimney, in a building other than a dwelling house. Air pollution is a menace to the health and well-being of a nation, and smoke abatement is therefore an important part of public health activities.

PREMISES AND OCCUPATIONS WHICH CAN BE CONTROLLED BY BYE-LAWS AND REGULATIONS.

Bye-Laws and Regulations in operation for the controlling of common lodging houses, tents, vans, sheds, factories, workshops (including bakehouses), and the following offensive trades: blood-boiler, bone boiler, fell monger, tanner, leather-dresser, soap-boiler, tallow melter, fat-extractor, tripe-boiler, glue-maker, gut scraper, fish frier, and rag-an-bone dealers.

All the scheduled offensive trades in the Urban area consist of fish-frying. It would appear that the Public Health Act, 1936, has the effect of repealing bye-laws made under the 1875 legislation, within three years after the passing of the new Act, subject, however, to the power of the Ministry of Health to extend the period. Under Section 108 of the Public Health Act, 1936, " every urban authority may, if required by the Ministry of Health, make bye-laws with respect to the trade of fish frying." Nothing in the new Act affects any legislation in operation under the Town Planning schemes for the regulation and control of the trade of fish frying. Experience will amply demonstrate that the local bye-law in connection with the above has proved of the greatest value, and all necessary action should be taken to ensure the continuance of these powers.

There has been observed a considerable reduction in any tendency to nuisances in this trade, and it is believed that the increased readiness to introduce gas cooking ranges and ventilating fans have contributed in a large measure to these improved conditions.

Camping Sites.

Number of sites which were used for camping purposes during 1938:—Nil.

Number of camping sites in respect of which licences have been issued by the local authority under Section 269 of the Public Health Act, 1936:—Nil.

Estimated maximum number of campers resident in the area at one time during the summer season, 1938:—Nil.

Common Lodging Houses.

There is only one Common Lodging House in the Chester-le-Street Urban District situate in Foundry Lane. A number of inspections of the building were carried out during the year 1938, and action was taken with regard to the cleanliness of the conveniences on one occasion.

OTHER SANITARY CONDITIONS REQUIRING NOTICE.

Shops and Offices.

Systematic inspection of Shops and Offices have been carried out throughout the year as far as possible. Of the premises examined, three notices were served regarding cleanliness, warming, and ventilation respectively. These received the required attention. A complete survey of the shops in the area in 1937 disclosed that there are 220 shops in the Urban District.

There is still strong suspicion that there are some persons carrying on general dealers business in the Council houses at Chester-le-Street. When discovered these should be forced to cease their activities. Not only are such shops contrary to the conditions of tenancy of the Council houses, but they also evade control under the Shops acts and under the Weights and Measures legislation.

Numbers of the poorer classes may be receiving short weight and are thus being constantly robbed by reason of the fact that the weighing machines are never supervised and tested, and inferior, if not contaminated, articles may be sold as a result of being exposed under unsuitable conditions or stored in the bedrooms and similar unsatisfactory places.

Those living in Council Houses who become aware of these nefarious establishments should report the same without delay. If the community would only shop in duly controlled and supervised business premises, it certainly would be to their advantage in many respects. If the working classes would only cease to patronise these secret businesses money would no doubt be saved and the public health improved.

Although some new shops have been erected in recent years, it is noted that most seem to require in varying degree to use artificial lighting in day-time. Of course, this method of illumination is certainly recognised in law, but from a public health aspect, it is considered very desirable that shops should be arranged on the pavilion plan, with glass roof lights admitting natural light, and with the storerooms or ware house in the basement instead of the upper floors. This arrangement would, I am confident, prove more cheerful, and no doubt more healthy, for the staff employed.

Many will have observed that some owners of shops, with the exception of those which have modernised methods for the exhibiting of goods to better advantage, have not, to the degree so much desired, attempted to avail themselves of a more satisfactory planning system.

Offices are inspected from time to time, but no action was taken during 1938 in this connection, there being nothing of a character to justify such action.

If the Local Unemployment Exchange may be regarded as a number of offices, useful reference may be directed to the improvements carried out at the north-end of the Exchange some time ago. As a result an open walled space has been left. It would be a humane gesture if this space could be covered with a suitable roof, and thus afford protection to the waiting and sometimes damp and cold unemployed who are now seen from time to time to congregate in the open.

Open Spaces.

The amenities of the area in the matter of Open Spaces are constantly progressing. The Paddling Pool for the children has now a concrete foundation; the north end has been railed in to prevent children falling into the river, and an artificial rock effect so ingeniously devised by the Surveyor, provides a pleasing background for the Children's Playground and the Riverside Park. The latter is improving daily, and is becoming more and more popular, not only with the local residents, but also attracts many from the neighbouring villages.

There is a Welfare playground at Chester Moor, and Pelton Fell has also a very pleasant Park and tennis courts. At the Chester-le-Street Council's Estate the filling, levelling and planting of trees is being continued with excellent results, and there is now a large open space and shelters available in front of the aged persons' homes at South Pelaw.

Disposal of the Dead.

The mortuary is situate at the Cemetery in Ropery Lane. One key is in the possession of the Cemetery Superintendent and access for vehicles is by way of Lancaster Terrace.

Street Cleansing.

Apart from the frequent daily sweepings, the ample rainfall rendered to some extent the use of the water cart unnecessary in the work of street cleansing.

Rats and Mice Destruction Act, 1919.

Daily action is taken in connection with rat extermination. National Rat Week takes place in November of each year, when special efforts take the form of a National campaign. As stated on previous occasions, it is considered that refuse tips provide both breeding and feeding grounds, and it is held that this fact affords further evidence in support of a refuse destructor.

Red Squill rat biscuits are in general use by reason of the fact that they are harmless to human beings and animals, which, of course, is an important condition in view of the fact that private buildings, etc., may be involved.

Hydrogen cyanide is not used locally for rat extermination.

HOUSING.

Number of New Houses Erected during the Year 323

1. Inspection of Dwelling-houses during the Year:—

(1) (a) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts) 450

(b) Number of inspections made for the purpose...

(2) (a) Number of dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidation Regulations, 1925 112

(b) Number of inspections made for the purpose 560

(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation 112

(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation 41

2. Remedy of Defects during the Year without Service of Formal Notices:—

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their Officers 35

3. Action under Statutory Powers during the Year:—

A.—Proceedings under sections 9, 10 and 16 of the Housing Act, 1936:—

(1) Number of dwelling-houses in respect of which notices were served requiring repairs 6

(2) Number of dwelling-houses which were rendered fit after service of formal notices—

(a) By owners 6

(b) By local authority in default of owners ... Nil

B.—Proceedings under PUBLIC HEALTH ACTS:—

(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied 35

(2) Number of dwelling-houses in which defects were remedied after service of formal notices—

(a) By owners 35

(b) By local authority in default of owners ... Nil

C.—Proceedings under sections 11 and 13 of the Housing Act, 1936:—

(1) Number of dwelling-houses in respect of which Demolition Orders were made ... ... Nil

(2) Number of dwelling-houses demolished in respect of pursuance of Demolition Orders ... ... Nil

D.—Proceedings under section 12 of the Housing Act, 1936:—

(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made ... ... Nil

(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit ... ... Nil

NOTE.—The following particulars are based on the figures so far available.

4. Housing Act, 1936.—Part IV.—Overcrowding:—

(1) (a) Number of dwellings overcrowded at the end of the year 385

(b) Number of families dwelling therein 520

(c) Number of persons dwelling therein 1,775

(2) Number of new cases of overcrowding reported during the year ... ... Nil

(3) (a) Number of cases of overcrowding relieved during the year 7

(b) Number of persons concerned in such cases ... 23

(4) Particulars of any cases in which dwelling-houses have again become overcrowded after the Local Authority have taken steps for the abatement of overcrowding ... ... Nil

(5) Any other particulars with respect to overcrowding conditions upon which the Medical Officer of Health may consider it desirable to Report.

OVERCROWDING.

Overcrowding has shown very little improvement since the Survey was made in 1935. At the same time it does not appear that the position is aggravated. It is confidently expected that Slum Clearance will be found to afford the dual advantage of rehousing from slum property and in many cases from overcrowded premises at the same time. Until Council houses are available for the overcrowded families, it is difficult to present a complete and accurate picture of the situation with regard to overcrowding locally. Inspection of the overcrowded families continue, and it has been necessary in a number of cases to remind owners with regard to the insertion of the " permitted " number slip in the rent books.

HOUSING CONDITIONS AND GENERAL PARTICULARS.

Slum Clearance.—The following are the particulars of the Slum Clearance Schemes for the years 1934, 1935, 1936, 1937 and 1938. These figures will no doubt be found of interest and will also provide a record of the property involved in these Schemes.

Slum Clearance Programme, 1934.	Houses.
South Row, Newfield 1—26	26
William Street, Newfield 1—29	29
North Row, Newfield 27, 28, 29, 30, 31, 32	6
Club Row, Pelton Fell 4, 5, 6, 7, 8, 9, 10, 11, 12	9
Holme's Buildings, Pelton Fell Block of Tenements and 2 houses.	
Steele's Yard, Chester-le-Street 23, 24, 28, 29, 30	5

Slum Clearance Programme, 1935.	Houses.
West Terrace, Newfield 1—26	26
Middle Row, Newfield 1—16	16
West Row, Newfield 1—18	18
Old Grange Terrace, Pelton Fell 9—20	12
Pelaw Square, South Pelaw 1—20	20
Hopgarth, Chester-le-Street 18—23, 25, 26	8
Store Opening, Chester-le-Street 8, 9, 10, 11, 16, 17, 12, 14	8
Albert Terrace, Chester-le-Street 1—7	7
Bland's Opening, Chester-le-Street 20, 21a and 21b	3
Edward Square, Chester-le-Street 28a, 28b and 29	3
Mill Houses (Bland's Opening, Chester-le-Street) 7, 8, 10, 11, 12, 13 and 14	7
Low Chare, Chester-le-Street	3
Total	122

Slum Clearance Programme, 1936.	Houses.
Pelton Fell Area.	
Old Grange Terrace Nos. 63—74 inclusive	12
Pit Row (including Middle Pit Row) 1—26	26
Whitehill Terrace Nos. 1—14	14
Double Row Nos. 1—20	20
Wheatley's Buildings	3
Waverley Terrace Nos. 1—6	6
Stella View and Bateman's Cottages	14
Single Row, Newfield, Nos. 1, 2, 3, 4, 17, 18, 19, 20	8
John Street Nos. 1—26	26
Low Howlett, High Howlett, Teasdales Buildings	20
Club Row Nos. 1, 2, 3 and 5	4
Lonsdale Street, Newfield	22
Copelands Yard Nos. 1—5	5
Queens Head Yard Nos. 1—6	6
Canada 23, 25, 27, 27a, 32a, 32b, 32c, 32d, 35, 36	10
North Burns (including Old Mill Houses) 10, 13a, 13b, 14, 15, 16, 29, 30, 32, 33, 34, 36, 37, 38, 39, 42a, 42b, 42c, 46a, 46b, 47, 48a, 48b, 50a, 50b, 51, 22a, 22b, 20	29
Pelaw Bank Nos. 2, 3 and 4	3
Wilson's Buildings (Bland's Opening) Nos. 14, 15, 16, 17, 18, 19	6
Bland's Opening (including Mission Hall) Nos. 1, 3, 5, 7	4

Edwards Square Nos. 1, 2, 3, 4, 5, 6, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21	19
Curry's Yard (including Gospel Hall) Nos. 45a, 45b, 46, 47, 48, 49a, Middle Chare (Curry's Yard), 33 and 35	9
Nicholson's Buildings, 1, 2, 3 and 4	4
Stoddart's Buildings, 1, 2, 3, 4, 5, 6, 7, 8, 9	9
Burnside Cottages (South Burns) 1, 2, 3	3
Thompson's Square 20, 22, 24, 26, 28, 30	6
Greenfield's Yard (South Burns) 1a, 1b, 2, 3, 4 and 5 ...	6
South Burns 18a, 18b, 21 and 23 (House and Shop), 25, 31, 32, 34, 36, 44, 46, 52, 54, 56, 58, 60, 62, 71, 73, 75, 77	21
Furnace Cottages	3
Total	318

Slum Clearance, 1937.

	Houses.
James Street, Newfield	28
Dean Street, Newfield	27
East View, Newfield	11
High Rows, Newfield	17
Poplar Street, Chester Moor	6
Rowe's Buildings, Chester-le-Street	6
Alexandra Place, Chester-le-Street	10
Robsons Cottage and Gut Scrapers	2
Mansell's Cottage, Bland's Opening	1
Cross Row, Pelton Fell	4
Pelton Level Cottages, Pelton Fell	2
Bank Top Cottage, Newfield	1
Total	115

Slum Clearance Scheme, 1938.

A Ministry of Health Inquiry was held at the Council Offices on December 20th, 1938, in connection with the Slum Clearance Scheme for that year. The Ministry of Health was represented by Mr. W. Mackintosh, and the Medical Officer and Sanitary Inspector gave evidence in support of the programme, which consisted of the following properties:—

1—17, Old High Row, Newfield.
1—11, East View, Newfield.
1—27, Dean Street, Newfield.
Bank Top Cottage, Newfield.
1—4, Cross Row, Newfield.
8—14, James Street, Newfield.
21—28, James Street, Newfield.
Robson's Cottage and Mansell's Cottage, Blands Opening.

Orders against which there were no objectors:—

2 and 3, Pelton Level Cottages.
1—7, James Street, Newfield.
15—20, James Street, Newfield.
1—6, Poplar Street, Chester Moor.
1—6, Rowes Buildings, Chester-le-Street.
1—5 and 40—44, Alexandra Place.
Gut Scrapers, Bland's Opening.

As a result of this enquiry, confirmed Orders were made operative with regard to all the above properties with the exception of Rowe's Buildings and the property situate in Bland's Opening.

South Pelaw Housing Scheme.

This estate is ideally situated on a hill above the Town, where accommodation is also provided for aged persons. An extensive open space with shelters have also been provided in connection with this scheme to afford shelter for mothers and babies and aged persons, who, at the same time, can avail themselves of the fresh air, which is so conductive to improved health.

The site of this estate is very pleasant, and this combination of circumstances all tends to achieve that high standard aimed at by this Authority. In this connection tribute should be made to the Surveyor for his vision and ingenuity in the development of this housing scheme.

Chester Moor.

The Chester Moor Council Estate is also situate in charming rural surroundings, and is greatly admired by many interested in municipal housing schemes and much appreciated by the tenants themselves. The streets are always clean as a result of the efforts of the occupiers and the weather, and a most pleasing impression is experienced by the appearance of this estate.

Pelton Fell.

The Council Estate at this part of the Urban District is still expanding, and the houses stand on a hill overlooking typically rural surroundings, and are planned in accordance with the high ideals of public health progress.

Council Estates.

There are now Council estates at Chester Moor, Pelton Fell, Chester-le-Street and South Pelaw. These schemes now comprise about 1,463 houses.

Adoption of Private Streets.

The folowing private streets have been adopted under the Private Street Works Act, 1892, and are now highways repairable by the inhabitants at large:—

The streets known as:—

The Crescent, Chester Moor.

Entrance from Waldridge Lane to East Avenue, Chester Moor.
Entrance from Waldridge Lane to West Avenue, Chester Moor.
The Crescent and East Avenue Back Street, Chester Moor.
The Crescent and West Avenue Back Street, Chester Moor.
The Crescent North End Back Street, Chester Moor.
Station View Front Street, Chester-le-Street.
Station View Back Street, Chester-le-Street.
Part Lancaster Terrace Back Street (100 yards from south end), Chester-le-Street.
Part Tudor Road Front Street (28 lin. yards from Broadway), Chester-le-Street.
Part George Street Front Street (from Red Rose Terrace Back Street to Stanley Terrace Front Street), Chester-le-Street.
Part New Grange Terrace Back Street, Pelton Fell.
Gardiner's Crescent Back Street (from Nos. 1 to 12), Pelton Fell.
Whitehill Crescent Front Street, Pelton Fell.
Whitehill Crescent Back Street, Pelton Fell.
Within the Urban District of Chester-le-Street.

INSPECTION AND SUPERVISION OF FOOD SUPPLIES.

Milk Supply.—The County Veterinary work has now become merged in the State veterinary service ,and no report is therefore available as hitherto regarding the inspections made by the County Veterinary Officers.

Farms.—By far the greater part of the quantity of the milk consumed in the Urban District is produced on farms outside the area. There are still 5 farms in this Chester-le-Street Urban District. Registered purveyors are now 25 in number. Chester Moor Farm produces Accredited milk and there is also a large quantity of Pasteurised milk consumed locally. All the samples last taken for advisory purposes regarding cleanliness proved very satisfactory. Samples are also taken from time to time by the sampling staff of the Durham County Council.

Meat and other Foods.—The Slaughter House at Rye Hill has been demolished, and the one at Chester Moor has ceased business for slaughtering purposes. Frequent inspections are carried out for the purpose of the inspection of meat and other foods. Only 6 slaughtering premises now remain in the area. It is again possible to report a continued reduction in the quantity of unsound food during 1938. There still remains 15 men registered under the Slaughtering Regulations of 1934. The following is a table giving particulars of the animals inspected as required by the Ministry of Health:—

Carcases Inspected and Condemned.

	Cattle, excluding Cows	Cows	Calves	Sheep and Lambs	Pigs
Number killed (if known) ...	362	386	—	1,306	457
Number inspected	150	173	—	633	122
All diseases except Tuberculosis					
Whole carcases condemned ...	—	—	—	—	—
Carcases of which some part or organ was condemned ...	2	8	—	—	—
Percentage of the number inspected affected with disease other than tuberculosis ...	1.3%	4.62%	—	—	—
Tuberculosis only					
Whole carcases condemned ...	—	—	—	—	—
Carcases of which some part or organ was condemned ...	—	—	—	—	—
Percentage of the number inspected affected with tuberculosis	—	—	—	—	—

Adulteration.—The food sampling of the district is still carried out by the inspectors of the Durham County Council, which is the legal food sampling and prosecuting Authority for this purpose, and who render reports from time to time regarding the work done by them throughout the County.

Chemical and Bacteriological Examination of Food.—Arrangements still exist with the Kings College (University of Durham) for the analysis of milk for advisory purposes; and the examination of food samples is carried out by the Durham County Analyst, whose premises are situate at Darlington.

Shell-fish (Molluscan).—Public Health (Shell-fish) Regulations, 1934 and Public Health (Cleansing of Shell-fish) Act, 1932.

There are no Shell-fish beds or layings in this district.

Nutrition.—Recent years has seen an increasing interest in this subject, and in this connection it should be pointed out the value of plain wholesome food taken at regular intervals. This applies particularly to children. Reference will be found in another part of this report to the value of nutrition in building up resistance to infection. It is very desirable that the public should be educated in the principles of dietetics so that they may be able to utilise small incomes to the best possible advantage — laying stress on the quality rather than the quantity of food purchased and consumed.

Prevalence of, and control over Infectious and other Diseases

Notifiable Diseases (other than Tuberculosis) during the year 1938.

Disease.	Total Cases Notified.	Cases admitted to Hospital,	Total Deaths.
C.S. Meningitis	—	2	—
Smallpox	—	—	—
Scarlet Fever	66	61	—
Diphtheria	39	37	1
Enteric Fever (including Paratyphoid)	—	—	—
Pneumonia	28	—	6
Erysipelas	14	5	—
Ophthalmia Neonatorum ...	2	—	—
Puerperal Pyrexia	6	4	—

Age Distribution of Cases.

Age Group.	Scarlet Fever.	Diphtheria,	Ophthalmia Neonatorum.	Pneumonia.	Erysipelas.	Puerperal Pyrexia.	C.S. Meningitis.
Under 1 year ...	0	0	3	0	0	0	0
1 year ...	0	0	0	0	0	0	1
2 years ...	1	0	0	0	0	0	0
3 „ ...	4	0	0	0	0	0	0
4 „ ...	0	2	0	0	0	0	0
5—9 years ...	33	21	0	2	0	0	0
10—14 „ ...	13	11	0	0	0	0	1
15—19 „ ...	4	2	0	5	2	0	0
20—34 „ ...	5	4	0	4	3	5	0
35—44 „ ...	3	0	0	3	6	1	0
45—64 „ ...	2	0	0	11	3	0	0
65 yrs. & over	0	0	0	3	0	0	0

Monthly Incidence of Cases.

Disease.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Scarlet Fever ...	5	7	9	6	9	9	5	5	4	3	2	1
Diphtheria ...	4	4	10	5	5	0	4	2	3	1	1	0
Pneumonia ...	3	11	2	3	10	1	0	1	3	1	1	2
Erysipelas ...	1	2	1	1	2	1	1	1	1	1	1	2
Ophthalmia Neonatorum	0	0	1	0	0	1	1	0	0	0	0	0
Puerperal Pyrexia	1	1	0	0	0	1	0	0	1	0	1	1
C.S. Meningitis	0	0	1	0	0	1	0	0	0	0	0	0

OPHTHALMIA NEONATORUM.

CASES.			Vision Un-impaired	Vision Impaired	Blindness (Total)	Deaths
Notified	Treated At Home	Treated in Hospital				
3	3	—	3	—	—	—

Prevention of Blindness.—Only 3 cases of Ophthalmia Neonatorum was reported, and a faaourable result was achieved. Under the Public Health (Ophthalmia Neonatorum) Amendment Regulations, 1937, this disease is now notifiable direct to the County Medical Officer of Health, who thereupon arranges suitable treatment.

TUBERCULOSIS.

(All Forms).

NOTIFICATIONS AND DEATHS IN THE URBAN AREA DURING THE YEARS: 1934, 1935, 1936, 1937, 1938.

Year.	Notifications.	Deaths.
1934	24	14
1935	26	10
1936	34	13
1937	31	14
1938	22	11

NEW CASES AND MORTALITY DURING THE YEAR 1938.

Age Periods.	New Cases.				Deaths.			
	Respiratory		Non-Respiratory		Respiratory		Non Respiratory	
	M.	F.	M.	F.	M.	F.	M.	F.
Under 1 year	...	...	...	...	...	...	...	...
1—4 ...	...	...	1	...	...	...	...	...
5—14 ...	...	1	3	2	...	...	1	...
15—24 ...	1	1	2	1	1	...	...	...
25—34 ...	1	...	...	...	3	1	...	...
35—44 ...	2	1	1	1	2	1	...	...
45—54 ...	1	...	...	1	...	...	...	1
55—64 ...	...	1	1	...	...	1	...	...
65 and over ...	...	...	...	...	...	...	...	...
Totals ...	5	4	8	5	6	3	1	1

Tuberculosis.—With regard to Tuberculosis within the Urban area, during the year 1938, it is gratifying to be able to record an appreciable reduction both in the number of the notifications and also of deaths from all forms of the disease. The figures for 1938 were: Notifications, 22; deaths, 11. In comparison with 31 notifications and 14 deaths during the year 1937.

The death rate from Tuberculosis in England and Scotland has fallen in the last 50 years by about 75%. Many authorities claim that this decline is almost wholly due to the anti-tuberculosis measures adopted during this period, whilst others produce evidence to the effect that the Tuberculosis mortality had been declining for many years prior to these special measures taken to combat the disease. It has thus been suggested, with some considerable evidence for the assumption, that we are at present at the end of a protracted epidemic of Tuberculosis, and they argue that the disease is subject to the somewhat similar epidemic waves seen in the case of the common epidemic diseases, but that, whereas the epidemic waves of these latter are relatively short, that of Tuberculosis may last for one hundred years or more, which is only fitting in a disease which may continue in the lifetime of an individual, in sharp contrast to those which only affect him for a few days or weeks. It is also probable that during the course of such a prolonged epidemic those nations particularly exposed to infection have acquired a strong resistance, and that those individuals peculiarly susceptible have died at early age, leaving relatively few descendants who have inherited their particular susceptibility. Finally, the number of people alive to-day in proportion to the number of people over 40 years of age is relatively less than was the case in the Victorian age, and it is also a well-known fact that Tuberculous disease — especially in the case of females — reaches its most lethal peak between the age of 25 and 35 years of age.

Thus, the decline in the Tuberculosis mortality may be due largely to factors over which we have no control — to the fact that, being on the down grade of an epidemic curve the seed of Tuberculosis is less common than formerly, and that it has a relatively smaller number than before on which to produce its effects. Whether we wholly believe these facts, or not, as producing any effect in the fall of Tuberculosis mortality this should not affect our attention with regard to the other preventitive aspects of the disease.

We have no reason to believe that an epidemiological curve cannot be modified beneficially, for the worst effects of epidemics of any of the acute infectious diseases can be ameliorated by popular education, social and public health measures, and by the private efforts of medical practitioners. The same can thus be said of Tuberculosis, and there seems no reason to deny that the

anti-tuberculosis measures adopted have been a very potent contribution in lowering Tuberculosis mortality. In this connection we may quote its great incidence in certain trades, and in certain districts where poverty and unemployment were rife, as was seen in Germany during the latter part of the Great War, and also to the almost complete absence of glandular and joint Tuberculosis in countries with a clean milk supply. It seems certain that epidemiology, immunity and natural selection are not the only factors in the problem of eliminating Tuberculous disease.

The essential factor contributing to the spread and morbidity is contact with the infecting agent, either from the human or animal source. It is therefore of interest to enquire to what extent such infection can or should be avoided, and whether our attempts to prevent infection of the adult should occupy an important place in our anti-tuberculosis measures. It is suggested by many authorities that adult Tuberculosis usually occurs as a late manifestation of earlier disease in childhood, and they also suggest that it is exceptional for an adult to develop Tuberculous disease as a result of a super-added infection from an external source, protected as he is by the immunity acquired in childhood, by contact with the tubercle bacillus. In exceptional cases, this immunity may be in abeyance either as a result of severe debility or some other infectious disease, and at such times a massive infections from an external source may cause Tuberculous disease. If these facts be true — there are many authorities who will deny the presence of this acquired immunity — it would seem of primary importance that our efforts should be concentrated in preventing massive infection in a young child, who forms very suitable virgin soil for Tuberculosis.

It is a probable fact that nearly 40% of children who show — according to special skin tests — a marked susceptibility before the age of two years, die from acute Tuberculosis before reaching the age of five years. Our efforts to prevent infection of a massive nature in young children must, in the present state of our knowledge, be directed along two main channels: (1) the separation and segregation of all young children from contact with cases of active Tuberculosis, and (2) the provision of a clean milk supply. If these measures are effectively carried out, they would go a long way, not only in lessening mortality from Tuberculosis in children, but would tend to prevent — or at least to considerably reduce — later manifestations of Tuberculous disease occuring in adults.

The chief method by which infection in a young child can be prevented is the removal of the adult to a sanatorium, where his length of stay should be adequate so as to heal his disease and render him non-infective to his family on his return home, or alternatively completely educated in preventitive measures, if discharged in an infective state.

In France the Grancher system is in wide use, where the child is removed from home to an institution where he is brought up away from sources of massive infection, and in conditions which tend to increase his natural resistance to the disease. Its great disadvantage is its interference with the continuity of the child's home life, and for this reason is perhaps undesirable in this country; so that our method of choice should be the removal of the adult to a sanatorium, where there should be an adequate supply of beds, and cases which can be nursed at home, i.e., where there are no children to be infected, should be discharged from the sanatorium to facilitate accommodation for more urgent cases. In addition, the risk of infecting the children should be made perfectly clear to the parent, and if this be done properly the segregation, however painful it may be, would rarely be refused.

The provision of a pure milk supply and the prevention of massive Tuberculous infection through infected milk, in contrast to the difficulties experienced in the segregation and separation of infected persons, is eminently practicable. The bovine type of Tubercle bacillus is responsible for a considerable percentage of Tuberculosis morbidity in children and is found in glandular, abdominal, bone and joint Tuberculosis, and meningeal lesions, and may, on occasion, cause pulmonary disease. In several countries, i.e., New Zealand and America, infection with the bovine Tubercle bacillus has been largely eradicated as the result of the measures adopted to ensure a clean milk supply, whereas there is no doubt but that considerable quantities of Tubercle infected milk is still consumed in this country. It has been contended by one authority (Griffiths) that if Tuberculosis caused by the bovine Tubercle bacillus was as distinct from Tuberculosis caused by the human bacillus, as some of the common infectious conditions are from each other, public opinion would long ago have insisted in the eradication of Tuberculosis in the bovine animal.

The provision of a clean milk supply would involve extensive legislative measures and considerable expense, which I am convinced would be fully justified.

Until the ideal of a national clean milk supply is achieved, it seems only common sense that all milk given to young children should be Pasteurised. It is possible that certain insignificant losses occur in its mineral and vitamin content, and it may not be quite 100% efficient in preventing an occasional bacillus in milk, yet all arguments pale in insignificance in comparison to the great risks which young children run in consuming unpasteurised milk from herds which have not been tuberculin tested.

By the segregation of adults and the provision of a clean milk supply we are therefore taking measures against massive infection of a virgin soil. By such measures we aim at the ideal of maintaining the infection as limited and infrequent as possible. And, having secured this, further measures should be actively taken to raise the resistance of the child by every means in our power, thus preventing this slight and infrequent infection from assuming disease proportions.

The resistance of any individual to his Tuberculous infection depends chiefly on factors largely of an environmental nature — such as housing conditions, nutrition, habits and the presence or absence of intercurrent infections. Innumerable statistics have proved the close relationship between Tuberculosis mortality and overcrowding, although the exact relationship of the overcrowding to Tuberculosis has been difficult to analyse into its various ramifications; for example, Tuberculous disease may have a serious effect on the earning capacity of the household, causing therefore an excess of Tuberculous families to live in conditions of poverty. On the other hand, overcrowding of itself, with its associated inferior nutrition is in itself a menace as well as producing conditions very favourable to contact infection. It seems quite clear that overcrowding, of itself, is an extremely important factor in the causation of Tuberculosis, but undoubtedly it will depend to some extent on the nature and degree of other adverse conditions present. This overcrowding factor is capable of being eliminated in course of time, and is a problem which is being steadily tackled in this country. The provision of better houses in the future should cause a marked diminution in the incidence of Tuberculosis. Sometimes, good housing conditions are acquired only at the expense of increased rental, so that the advantages which would have accrued by the provision of these may be considerably outweighed by the depreciation in the nutrition of the family. The late Dr. McGonigle, in a well-controlled observation at Stockton-on-Tees, has shown this very clearly — the death rate from Tuberculosis actually rising under improved housing conditions. Numerous other well-controlled observations in addition to the above-mentioned, have proved a definite connection between Tuberculosis and under-nourishment, Tuberculous families eating more bread, but consuming less meat, less butter and particularly less milk than non-tuberculous families. These facts would seem to indicate the value of the principles of good nutrition in the building up of resistance to the disease. Progress is being made in this field, and the population had probably never been so well fed as it is to-day. One of the most important legislative measures in public health in this connection, is the provision of milk for school children.

Preventitive measures against Tuberculosis cannot hope to be completely successful without the active and intelligent co-operation of all members of the medical profession — particularly the medical practitioner and school medical officer — as these are in almost daily contact with young children. Certain other preventive aspects of the disease cannot be discussed at length, i.e., the raising of the resistance of delicate children at open-air schools, and also the question of the prevention of certain diseases which strongly predispose towards Tuberculosis, such as Silicosis. Lastly, I should like to stress the value of contact examination as being one of the most important functions of a Tuberculosis dispensary in the prevention of Tuberculosis.

No action was taken in 1938 under the Public Health (Prevention of Tuberculosis) Regulations of 1925, or under Section 172 of the Public Health Act of 1936.

I cannot conclude this Report without expressing my warmest thanks to the general practitioners of the Urban District for their constant cordial co-operation and to the members of the Council and its Officers for the support which they have accorded me in the discharge of my duties as Medical Officer of Health.